

1. *Line 3420 Excavation, Hauling, and Reuse of solid Waste Soil – 16,574 CY. Special provisions indicate where this material is to be placed – Ramp BA. My question is whether this volume of material has been deducted from the common excavation quantity or is it still part of the common excavation volume. Please clarify.*

The Excavation, Hauling , and Reuse of Solid Waste Soil was not consistently deducted from the common excavation quantity within the planset. All necessary changes to correctly quantify these items will be included in Addendum #2.

2. *Line 5420 Management of PF Petroleum Contaminated Soil. Special provision indicate location(s) and quantity. Question is whether the quantity was deducted from the common excavation quantity or not. Please clarify.*

The Management of Petroleum Contaminated Soil and Solid Waste was not consistently deducted from the common excavation quantity within the planset. All necessary changes to correctly quantify these items will be included in Addendum #2.

3. WALL 40-525

1. *Wall elevation views show the wall top of leveling pad to be a combination of 1'-6" and 2'0" below grade. The general notes and typical sections show 2'0". Which is correct?*

The combination of 1'-6" and 2'-0" is correct. The wall quantities are correct. The dimensions on the Elevation views is correct and the dimension on the Typical Sections for Segments A, B, C, D, & E are incorrect and will be revised after the project is let.

2. *There is a future noise barrier along much of the wall. What is the loading of the barrier that needs to be accounted for in the MSE wall design, or will the future crash barrier be designed to support the noise wall loading?*

The future parapet and moment slab (crash barrier) have been designed to resist the loading from the noise barrier. All forces will enter the MSE wall system as a soil bearing pressure along the bottom of the moment slab. None of the force will bear on the MSE wall concrete panels. The noise barrier panel weight will be dependent upon the specific noise barrier selected by the contractor in a future contract. The noise barrier wind loading requirements are included in Special Provision Article 83, Section B.2.1.

WALL 40-552

3. *There is a noise barrier along much of the wall. What is the loading of the barrier that needs to be accounted for in the MSE wall design, or is the crash barrier be designed to support the noise wall loading?*

The parapet and moment slab (crash barrier) have been designed to resist the loading from the noise barrier. All forces will enter the MSE wall system as a soil bearing pressure along the bottom of the moment slab. None of the force will bear on the MSE wall concrete

panels. The noise barrier panel weight is dependent upon the specific noise barrier vendor selected by the contractor. The noise barrier wind loading requirements are included in Special Provision Article 83, Section B.2.1.

Follow up response:

WALL R-40-525

The maximum unfactored lateral load applied to the MSE wall is 0.57 kips per foot based on a wind pressure of 37.5 psf and a maximum noise barrier height of 15 feet. Similarly, the min/max unfactored vertical load applied to the MSE wall is 0.6/0.9 kips per foot based on a noise barrier dead load of 40/60 psf and a maximum wall height of 15 feet.

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The maximum unfactored lateral load applied to the MSE wall is 0.75 kips per foot based on a wind pressure of 37.5 psf and a maximum noise barrier height of 20 feet. Similarly, the min/max unfactored vertical load applied to the MSE wall is 0.8/1.2 kips per foot based on a noise barrier dead load of 40/60 psf and a maximum wall height of 20 feet.

Please note a minimum noise barrier weight of 40 psf and a maximum noise barrier weight of 60 psf were analyzed based on the possibility of different manufacturers of the noise barrier.

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4. *Looking at X-sections for the NSC alignment (pg 4319 – 4320, sta 19+50 – 21+00). X sections indicate the areas of Management of Petroleum Contaminated Soils along with the X-sections for USH 45 NB (R-40-577) (pgs. 3605 – 3608, sta 320+50 – 322+00).*

Looking at the Earthwork data (pg. 3406) for USH 45 NB R-40-577 (sta. 317+04 – 324+97) indicates a fill of 16046 CY.

Comparing the X-sectional data to the earthwork data, there seems to be a conflict. X-sections indicates cut, earthwork data indicates fill.

Special provisions for Management of Petroleum Contaminated Soils indicates that there is 8,021 CY of C. Soil in this area while EW data indicates fill. Also, the Special provision does not address the issue of backfilling the Contaminated Soils Excavation Void.

Also, based upon the X-sections for the contaminated soils and the indicated depths relating to the TLE, there isn't enough room to safely sideslope the excavation. Temporary shoring would be needed in order to remove the C Soil to the indicated depths and stay within the TLE Limits.

In summary I believe there are 3 issues;

- 1. Earthwork data indicates import when in reality it is export.*
- 2. Backfilling of C Soil Void is not addressed as how we are to be paid.*
- 3. Temporary shoring is required and should be paid for.*

Please look into this matter and Clarify. Feel free to call for a verbal clarification if what I'm trying to state is not clear.

See plan sheet 3218. The detail "Wall Excavation Limits Diagram at Petroleum-Contaminated Soil" should help to make the earthwork data more understandable. The cut for the MSE wall backfill is incidental to the wall therefore not included in the common excavation quantity/earthwork data tables. The fill required between where the wall straps end and where the wall excavation limit is shown is counted as embankment/fill in the earthwork data tables. Common excavation is paid for in the area above the wall as shown in the detail. In the contaminated soil void area that is not part of the MSE wall construction, the void should be filled with standard embankment. The temporary shoring along the R/W was not included in the plans and will be added as part of Addendum #2. Minor earthwork quantity changes in this area will also be made as part of Addendum #2.

5. *Was the shrinkage factor of 20% derived from geotechnical data or is it an arbitrary number? It seems to be rather high.*

The 20 percent shrinkage factor is a historical number that has been used on DOT projects. It generally has been confirmed as earthwork progresses on projects.

6. *Why is "topsoil special" necessary for areas with WisDOT #30 mix? It seems that with the seeding maintenance requirements, there may not be a necessity for "topsoil special".*

The purpose of the Topsoil Special item is to combine the standard topsoil and salvaging topsoil items so that it is paid for the same whether it is salvaged or imported. The Topsoil Special item does not pertain to the seeding maintenance requirements.

7. *What arrangements have WisDOT made to perform an expedited review of MSE wall shop drawings? For scheduling purposes, what is the duration of WisDOT reviews?*

WisDOT understands the importance of this issue and is working to minimize the review time for MSE wall shop drawings. Walls that are schedule critical will be prioritized and the reviews will be completed as timely as possible.

8. *A new type of MSE wall backfill is specified for cold weather construction. Is this material available from pits in the Milwaukee area? What are the previous WisDOT projects where this material type has been used in the past?*

The MSE wall backfill specified for cold weather construction is Coarse Aggregate No.1 as given in 501.2.5.4.4 of the Standard Specifications. The backfill is coarse aggregate that is specified and used in DOT concrete mixes and is readily available. The availability was considered in development of the specification and that's why the DOT coarse aggregate size No.1 was selected for use.

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9. *I'm looking for the existing contours, design contours and the annotation layer (All in CAD Dwg format).*

The contours can be found at the below location:

<ftp://ftp.dot.wi.gov/dtsd/se-region/SEF/ZooIC/10603380/CONTOURS>

10. *There are several geotechnical reports available for bridge and wall structures. Are there any geotechnical reports available for the roadway portion of the project?*

A report titled "Zoo Mainline Pavement Subgrade Data.pdf" has been added to the geotechnical report available documents on the ftp site.

11. *Will stay in place metal decking be allowed on Structures B-40-537 & B-40-538? Also, due to the enhanced schedule on this project, will stay in place metal decking be allowed on all remaining proposed Bridge Structures?*

Yes stay-in place metal decking will be allowed for temporary structures B-40-537 and B-40-538 as well as precast partial depth concrete structural deck panels as specified in special provision article 139. Stay-in-place metal decking will only be allowed on B-40-537, B-40-538 and in the interior bay of B-40-855 steel box girders as specified in special provision article 138.

12. *Are submittal drawings required for all 878 drainage structures? Believe the intent was to require submittal drawings for anything WisDOT does not have a standard drawing for. If submittals are required for every structure does each submittals need to be stamped individually by a professional engineer? It will add significant cost and consume a lot of our time and yours to review. All submittals returned by Wisconsin Construction Partners, JV state "Submittal reviewed for compliance with design concept only. Review does not constitute a check of dimension nor does it relieve the Contractor of responsibility for errors or deviations from requirements." Special Provision Article 86, page 242 states – (14) Shop drawings shall be prepared, verified and stamped by a professional engineer registered in the State of Wisconsin for all storm sewer structures.*

In the upcoming addenda, the special provision will be clarified for structures requiring professional engineer stamped drawings. Shop drawings will be required for all drainage structures. For structures where WisDOT standard detail drawings are not available, shop drawings prepared, verified and stamped by a professional engineer registered in the State of Wisconsin will be required.

13. *Does all storm sewer pipe require a rubber gasket and does it need to be a factory lubricated rubber gasket? Several WDOT approved concrete pipe producers do not make elliptical pipe with rubber gaskets. Can we use a mastic joint compound on the elliptical pipe? Some producers do not have factory lubricated gaskets for round pipe. Can a regular gasket be used? Special Provision Article 86, page 243 states – Provide factory lubricated rubber gasket joints for all storm sewer pipes.*

All storm sewer pipe will require a rubber gasket. For a horizontal elliptical pipe with a rise greater than 40 inches, mastic joint compound can be used. A “factory lubricated” rubber gasket will not be required. In the upcoming addenda, the special provisions will be revised to clarify these issues.

14. *Is aggregate backfill conforming to standard spec 209 required outside the roadway on proposed pipes, structures and removals? Plan sheet 626 note 1 states – if the pipe is outside the traveled way inclusive of shoulders and auxiliary lanes, native backfill may be used above stone chips. Plan sheet 626 note 2 states – if the pipe is within the traveled way inclusive of shoulders and auxiliary lanes, backfill above stone chips shall conform to Section 209. Special Provision Article 86, page 243 states – Conform to backfill detail as shown on the plan. Backfill all trenches and excavations of all new storm sewer and storm sewer structures not occupied by Backfill Controlled Low Strength or stone chips immediately after completing the sewer work with backfill material conforming to standard spec 209. Backfill locations where existing storm sewer and or existing storm sewer structures have been called for removal or abandoning not occupied by the new roadway structure or occupied by Backfill Controlled Low Strength or stone chips immediately after completing the sewer work with backfill material conforming to standard spec 209. Please clarify?*

Conform to notes shown on construction detail for pipes, structures and removal backfills. In the upcoming addenda, special provision will be clarified for placement of backfill material outside traveled way.

15. *Are the staging areas provided in the contract documents within the footprint of the project, and therefore a part of the OCIP program?*

Laydown areas and storage areas shown on the plans are within the footprint of the project and covered by OCIP. Other areas found/controlled by specific contractors would be designated as “off site” storage areas and would not be covered (examples might include a shop/yard nearby which would service multiple projects, not just OCIP project. A commercial plant, not covered vs a batch plant set up specifically for the contract, covered)